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| Autore                  | Hasegawa Yasuchika                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Titolo                  | Lanthanide-Based Wavelength Conversion Materials // by Yasuchika Hasegawa, Yuichi Kitagawa, Sunao Shoji                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Pubbl/distr/stampa      | Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| Edizione                | [1st ed. 2024.]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Descrizione fisica      | 1 online resource (216 pages)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Altri autori (Persone)  | KitagawaYuichi<br>ShojiSunao                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Disciplina              | 546                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Soggetti                | Chemistry, Inorganic<br>Materials<br>Photonics<br>Detectors<br>Chemistry<br>Agriculture<br>Inorganic Chemistry<br>Photonic Devices<br>Sensors and biosensors<br>Materials Chemistry                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Lingua di pubblicazione | Inglese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Formato                 | Materiale a stampa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Livello bibliografico   | Monografia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Nota di contenuto       | 1. Introduction -- 2. Fundamental photophysics of lanthanide complex -- 3. Typical previous applications -- 4. Recent wavelength conversion applications -- 5. Future applications -- 6. Future perspectives.                                                                                                                                                                                                                                                                                                                                                                                              |
| Sommario/riassunto      | This book introduces optical wavelength conversion materials using luminescent lanthanide complexes. Their optical wavelength conversion properties are applied to color-tuning LED materials, UV photon-energy conversion for solar cells, and plant growth acceleration for future green-house application. In this book, the fundamental wavelength-conversion mechanism, recent trends and advanced research progress of optical wavelength conversion materials are explained and discussed using historical and recent academic reports. Furthermore, advanced future applications using luminescent |

lanthanide complexes, are introduced. .

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